ABSTRACT OF THE DISCLOSURE

A receiver front end processor for use in a receiver system accepts a data stream comprising samples of an entire frequency band, the band of frequencies being divided into two or more non-overlapping channels with each channel occupying no more than a predetermined maximum frequency band. The band being sampled at a rate of at least twice the frequency of the highest frequency in the band. The receiver front end processor converts, either in parallel or iteratively, the component channels to baseband signals sampled at twice the symbol rate of each of the channels. A single analog to digital converter may be employed to produce the sampled whole-band data stream operated upon by the receiver system's front end processor.